

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in this application.

LISTING OF THE CLAIMS:

Claims 1-28. (Canceled)

29. (Currently amended) A digital signal recording disc comprising:

a first area (ATS D) storing an audio title set (ATS) containing at least first and second channel digital audio signals of a plurality of channels of audio data, wherein said plurality of channels are divided into first and second channel groups (Group 1, 2);

the audio title set (ATS) including an audio title set information (ATSI) containing information of first and second parameters respectively relating to the first and second channel digital audio signals, the first parameter comprising at least one item selected from the group comprising;

quantization bit numbers (Q1, Q2) of the first and second group channel digital audio signals a quantization bit number (Q1) of the digital audio signal or signals of the channel or channels in the first channel group and a quantization bit number (Q2) of the digital audio signal or signals of the channel or channels in the second channel group;

sampling frequencies (fs1, fs2) of the first and second channel group digital audio signals a sampling frequency (f1) of the digital audio signal or signals of the channel or channels in the first channel group and a sampling

frequency (f2) of the digital audio signal or signals of the channel or channels in the second channel group;

the second parameter (CHANNEL ASSIGNMENT) comprising assignment of the digital audio signals to said first and second channel groups;

the digital signal recording disc being void of a second area (VTS D) storing a video title set (VTS); and

the first area also storing an audio manager (AMG) containing data for controlling the digital audio signals;

wherein the sampling frequency (f1) of the digital audio signal or signals of the channel or channels in the first channel group and the sampling frequency (f2) of the digital audio signal or signals of the channel or channels in the second channel group are different from each other.

30. (Currently amended) A digital signal recording disc as recited in claim 29, wherein the ~~quantization bit numbers of the first and second channel digital audio signals quantization bit number (Q1) of the digital audio signal or signals of the channel or channels in the first channel group and the quantization bit number (Q2) of the digital audio signal or signals of the channel or channels in the second channel group~~ are different from each other.

31. (Canceled)

32. (Canceled)

33. (Currently amended) A digital signal recording disc as recited in claim 29, wherein the audio title set (ATS) comprises an audio-only-title audio-object

AOTT-AOB, and the audio title set information (ATSI) contains an audio-only-title audio-object attribute AOTT-AOB-ATR (AOTT-AOB-ATR) for storing the information of first and second parameters.

34. (New) A method of reproducing data from a digital signal recording disc having a first area (ATS D) storing an audio title set (ATS) containing digital audio signals of a plurality of channels divided into first and second channel groups (Group 1, 2); the audio title set (ATS) including an audio title set information (ATSI) containing first and second parameters relating to the digital audio signals, the first parameter comprising a sampling frequency (fs1) of the digital audio signal or signals of the channel or channels in the first channel group and a sampling frequency (f2) of the digital audio signal or signals of the channel or channels in the second channel group; the second parameter (CHANNEL ASSIGNMENT) comprising assignment of the digital audio signals to said first and second channel groups; the digital signal recording disc being void of a second area (VTS D) storing a video title set (VTS); and the first area also storing an audio manager (AMG) containing data for controlling the digital audio signals, the method comprising the steps of:

reading the first parameter and the second parameter (CHANNEL ASSIGNMENT) from the first area (ATS D) of the disc;

reading the digital audio signals from the first area (ATS D) of the disc;

decoding the read digital audio signals into a decoded digital audio signal or signals of the channel or channels in the first channel group and a decoded digital audio signal or signals of the channel or channels in the second channel group in response to the read second parameter (CHANNEL ASSIGNMENT);

implementing digital-to-analog conversion of the decoded digital audio signal or signals of the channel or channels in the first channel group in response to the sampling frequency (fs1) in the read first parameter; and

implementing digital-to-analog conversion of the decoded digital audio signal or signals of the channel or channels in the second channel group in response to the sampling frequency (fs2) in the read first parameter.

35. (New) A method of recording data to a digital signal recording disc, comprising the steps of:

generating an audio title set (ATS) containing digital audio signals of a plurality of channels divided into first and second channel groups (Group 1, 2);

the audio title set (ATS) including an audio title set information (ATSI) containing information of first and second parameters relating to the digital audio signals, the first parameter comprising at least one item selected from the group comprising;

a quantization bit number (Q1) of the digital audio signal or signals of the channel or channels in the first channel group and a quantization bit number (Q2) of the digital audio signal or signals of the channel or channels in the second channel group;

a sampling frequency (f1) of the digital audio signal or signals of the channel or channels in the first channel group and a sampling frequency (f2) of the digital audio signal or signals of the channel or channels in the second channel group;

the second parameter (CHANNEL ASSIGNMENT) comprising assignment of the digital audio signals to said first and second channel groups;

generating an audio manager (AMG) containing data for controlling the digital audio signals;

recording said generated audio title set (ATS) to an area (ATS D) in the disc; and

recording said generated audio manager (AMG) to the area (ATS D) in the disc.